Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-27. Cancelled.

28. (Original) A substrate coated with a water swellable gel coating comprising:

a substrate; and

a water swellable gel coating adhering to the substrate, wherein the gel coating includes a water swellable polymer and one or more antimicrobial metals formed with atomic disorder, and wherein the gel coating becomes antimicrobial and anti-inflammatory when wet.

29. (Original) The coated substrate of claim 28, wherein the one or more antimicrobial metals is formed with sufficient atomic disorder such that, in contact with an alcohol or water-based electrolyte, the coating releases ions, atoms, molecules or clusters of the antimicrobial metal on a sustainable basis.

30. (Original) The coated substrate of claim 29, wherein the water swellable polymer is a lubricious polymer to provide a lubricous coating on the substrate that becomes lubricious when wet.

31. (Original) The coated substrate of claim 30, wherein the lubricous polymer is a hydrophilic polymer which is provided either in a powder form, or in a form coated with the one or more antimicrobial metals.

32. (Original) The coated substrate of claim 31, wherein the lubricious polymer is one or more of cellulose and derivatives thereof, polyvinyl alcohol, starch, glycogen, gelatin, pectin, alginate, chitosan, chitin, gum arabic, locust bean gum, karaya gum, gum tragacanth, ghatti gum, agar-agar, carrageenans, carob gum, guar gum, and xanthan gum.

33. (Original) The coated substrate of claim 31, wherein the lubricious polymer is selected from one or more of carboxymethyl cellulose, polyvinyl alcohol, and alginate.

34. (Original) The coated substrate of claim 33, wherein the antimicrobial metal is one or more of Ag, Au, Pd or Pt, and wherein the antimicrobial metal powder is nanocrystalline.

35. (Original) The coated substrate of claim 28, wherein the substrate is one or more of catheters, urinary catheters, in-dwelling catheters, drainage catheters, venous catheters, arterial catheters, central line and peripheral line catheters, cannulas, endoscopes, laparoscopes, sutures, staples, myringotomy tubes, wound or nasal packings, dressings, gauze, bone screws, halo screws, total joints, vascular grafts, hernia meshes, guide wires, needles, wound drains, pacemaker leads, condoms, contact lenses, peristaltic pump chambers, arteriovenous shunts, gastroenteric feed tubes, endotracheal tubes, gloves and implants.

36. (Original) The coated substrate of claim 34, wherein the substrate is one or more of catheters, urinary catheters, in-dwelling catheters, drainage catheters, endoscopes, laparoscopes, myringotomy tubes, dressings, gauze, total joints, vascular grafts, hernia meshes, guide wires, needles, wound drains, pacemaker leads, condoms, contact lenses, peristaltic pump chambers, arteriovenous shunts, gastroenteric feed tubes, endotracheal tubes, gloves and implants.

37. (Original) The coated substrate of claim 36, wherein the grain size of the antimicrobial metal powder is less than 50 nm.

38. (Original) The coated substrate of claim 36, wherein the grain size of the antimicrobial metal powder is less than 40 nm.

39. (Original) The coated substrate of claim 36, wherein the grain size of the antimicrobial metal powder is less than 25 nm.

40. (Original) The coated substrate of claim 37, wherein the particle size of the antimicrobial metal powder is less than 100 μM.

41. (Original) The coated substrate of claim 38, wherein the particle size of the antimicrobial powder is less than 40 μm.

42. (Original) The coated substrate of claim 39, wherein the particle size of the antimicrobial powder is less than 10 μm.

43. (Original) The coated substrate of claim 40, wherein the amount of the antimicrobial metal in the coating when wet is in the range of 0.001 to 30 wt%.

44. (Original) The coated substrate of claim 42, wherein the amount of the antimicrobial metal in the coating is in the range of 0.01 to 5 wt %.

45. (Original) The coated substrate of claim 42, wherein the amount of the antimicrobial metal in the coating is in the range of 1 to 3 wt %.

46. (Original) The coated substrate of claim 45, wherein the antimicrobial metal is Ag, formed as a composite with oxygen.

47. (Original) The coated substrate of claim 28, wherein the coating includes one or more agents selected from preservatives, texturizing agents, thickeners, anticoagulants, β-glucan, hormones, hyaluronic acid, cytokines, and bone morphogenetic proteins, in a therapeutically acceptable amount.

48. (Original) The coated substrate of claim 46, wherein the coating includes one or more agents selected from preservatives, texturizing agents, thickeners, anticoagulants, β-glucan, hormones, hyaluronic acid, cytokines, and bone morphogenetic proteins, in a therapeutically acceptable amount.

49. (Original) The coated substrate of claim 46, wherein the coating includes one or more agents selected from methyl paraben, propyl paraben, polyvinyl alcohol, heparin, β-glucan, epidermal growth factor, platelet derived growth factor, and transforming growth factor, in a therapeutically acceptable amount.

50. (Original) The coated substrate of claim 28, wherein the coating includes less than 0.01 % wt of glycerin, glycerols, chloride salts, aldehydes, ketones, long chain alcohols and triethanolamine

51. (Original) The coated substrate of claim 49, wherein the coating includes less than 0.01 % wt of glycerin, glycerols, chloride salts, aldehydes, ketones, long chain alcohols and triethanolamine.

52-60. Cancelled.